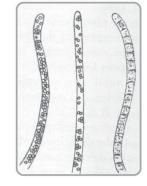
Geomicrobiology, Fall 2019

Homework #4

For this homework, you will read and interpret a recent article from the primary literature related to your final proposal or paper topic, and then write a 500-700 word layperson summary of the major findings and significance of the work. This assignment will help you continue to



familiarize yourself with primary scientific literature in the field of geomicrobiology, as well as to hone your science communication skills.

The goal of this homework is to write an article summary that is suitable for submission to the science news site Sciworthy (https://www.sciworthy.com). Sciworthy is a website devoted to science communication, and is a place for scientists to report recent discoveries in a news-style format that is accessible to the public. Sciworthy is supported by the 501(c)(3) non-profit organization Blue Marble Space and run by scientists. Anyone can volunteer to write for Sciworthy, and many of the contributing writers and editors are graduate students and postdocs.

Once you turn in your articles, I will evaluate them and determine if they are of sufficient quality. Then, as a class, we will submit the best ones to sciworthy.com, and the Sciworthy editors will publish those that they deem acceptable. If your article is selected, and in addition to the recognition for having a publication on Sciworthy, *you will be excused from the final exam!* (You will also receive full credit on this homework assignment.) And, I hope you will consider continuing to write for Sciworthy in the future.

Instructions:

1) First, start by taking some time to familiarize yourself with Sciworthy. Visit sciworthy.com, read the "What is Sciworthy?" link, and peruse 2-3 articles from the main page. Here are direct links to some recent articles summarizing geomicrobiology and environmental microbiology publications:

https://www.sciworthy.com/safety-in-numbers-bacterial-resistance-in-space/

https://www.sciworthy.com/can-life-hiding-near-yellowstone-national-parks-hot-springs-tell-us-about-the-ancient-earth/

https://www.sciworthy.com/bacteria-with-nanowires-can-electrocute-metals-instead-of-breathe/

https://www.sciworthy.com/hulk-like-microorganisms-in-soil-can-survive-high-levels-of-gamma-radiation/

- 2) Next, select an article from the primary literature that was published within the last year. I strongly suggest that you pick an article related to your proposal or review paper topic, but you are welcome to choose any recent article, so long as it is related to geomicrobiology.
- 3) Then, register for an account at https://sciworthy.com/create-your-student-account/ and go through their writer training materials. Use this link to access the training:

https://sciworthy.com/courses/writer-training/

Once you request an account, the Sciworthy team will respond within 24 hours. If you'd rather not register yourself, or if you'd like to peruse the training materials in the meantime, you are welcome to use my account to access the materials at the link above.

login: djones

passwd: Geomicro2019 (case sensitive)

The training will take up to 45 minutes to complete. It is full of excellent insight and instruction about science communication and writing. **Take advantage of this opportunity to soak up advice from professionals that have put a LOT of thought into accessible science writing.** Please pay especially close attention to the advice in lesson 4 ("What is "Good" Writing?") about communicating science, and the "ABT" structure described in lesson 5. You will also see links to external resources, many of which were used to develop the training and are cited throughout.

After taking the training, I recommend you revisit some of the articles on the Sciworthy website to see how their writers put this training to use.

4) Finally, write your article! Use the Sciworthy article template form (you can download it from sciworthy.com, and I've also posted it on Canvas). Sciworthy articles are 500-700 word summaries that are targeted for readers who are interested in science, but have not studied much science themselves, such as an engaged high school student or a high school educated adult. Sciworthy also stresses that their content should be accessible to adults across the spectrum of political views.

The section on article format (section 10) will provide guidelines for your article itself, and section 11 provides a style guide. I recommend reading these, then revisiting example Sciworthy articles as you start to prepare your article.

https://sciworthy.com/training/writer-training/lessons/article-format/

Here is Sciworthy's suggested article structure:

- 1. Catch the reader's attention by relating the subject of the article to something they would recognize. Connect it to a big picture question.
- 2. Who did the study? Where was the study done?
- 3. What was the question the study attempted to answer? How does it relate to the big picture question from the first section?
- 4. Describe the methods the researchers used to answer the question. Use lots of action words. What did the researchers actually, physically do?
- 5. Describe the study's conclusions. What were the results of the experiments? Did they answer the question they set out to answer? What other questions remain?
- 6. What is the significance of these results? Why is it "Sciworthy?"

Turn in your article to me in electronic format using Sciworthy's article template form, which will include your summary as well as information on the recent publication you are summarizing. You will also need to select a "featured image" for your article, per the guidelines and examples on sciworthy.com.